T-Mobile HPE Redfish Documentation

Contents

Module `rf`

Sub-modules

Module `rf.change_password`

Functions

Function `change_password`

```
def change_password(rfo, username, password, api=1)
```

Change iLO user account password

Parameters: rfo (object): Redfish login session username (str): User name password (str): New password

Returns: str: iLO response status

Module `rf.config`

Module `rf.create_user`

Functions

Function `create_user`

```
def create_user(rfo, username, password, role, api=1)
```

Create iLO user account

Parameters: rfo (object): Redfish login session username (str): User name password (str): Password role (str): Administrator, ReadOnly or Operator

Returns: str: iLO response status

Module `rf.enable_sriov`

Functions

Function `enable_sriov`

```
def enable_sriov(rfo, enable='Enabled', api=1, unit=1)
```

Enable SRIOV

Parameters: rfo (object): Redfish login session enable (str): Enabled, Disabled api (int): API Value unit (int): Unit Value

Returns: str: iLO response status

Module `rf.get_bios`

Functions

Function `get_bios`

```
def get_bios(rfo, api=1, unit=1)
```

This function fetches the BIOS VERSION of the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/ Information is in the following JSON snippet. “BiosVersion”: ""

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: string: Bios Version

Module `rf.get_cpu`

Functions

Function `get_cpu`

```
def get_cpu(rfo, api=1, unit=1)
```

This function fetches the CPU model of the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/ Information is in the following JSON snippet. “ProcessorSummary”: { “Model” }

Parameters: object: Redfish Client Login Object int: API Value int: Unit Value

Returns: string: CPU Model

Module `rf.get_cpu_blob`

Functions

Function `get_cpu_blob`

```
def get_cpu_blob(rfo, api=1, unit=1)
```

Aggregate CPU information

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: list: JSON

Module `rf.get_cpu_blob_alternative`

Functions

Function `get_cpu_blob`

```
def get_cpu_blob(rfo, api=1, unit=1)
```

Display aggregate CPU information

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: list: JSON

Module `rf.get_disk_blob`

Functions

Function `get_disk_blob`

```
def get_disk_blob(rfo, api=1, unit=1)
```

Aggregate disk information

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: list: JSON

Module `rf.get_disk_capacity`

Functions

Function `get_disk_capacity`

```
def get_disk_capacity(rfo, api=1, unit=1)
```

This function fetches the Disk Capacity of the server. URL is https://IP_ADDRESS/redfish/v1/chassis/1/ Information is in the following JSON snippet. “Links”: { “Drives”:}

NOTE: There could be multiple drives in the server.

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: int: Combined Disk Capacity (Bytes)

Module `rf.get_disk_count`

Functions

Function `get_disk_count`

```
def get_disk_count(rfo, api=1, unit=1)
```

This function fetches the number of disks in the server. URL is https://IP_ADDRESS/redfish/v1/chassis/1/ Information is in the following JSON snippet. “Links”: { “Drives”:}

Parameters: rfo (object): Redfish Client Login Object api (int): API Value api (int): Unit Value

Returns: int: disk count

Module `rf.get_eth`

Functions

Function `get_eth`

```
def get_eth(rfo, api=1, unit=1, nic_name='')
```

This function fetches the information of a specific NIC on the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/ MODEL information is at the top level of the JSON Hierarchy

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: list: names of the NICS on the server

Module `rf.get_firmware`

Functions

Function `get_firmware`

```
def get_firmware(rfo, api=1, unit=1)
```

This function fetches the FIRMWARE of the server. URL is https://IP_ADDRESS/redfish/v1/chassis/1/ Information is in the following JSON snippet. OEM“: { Hpe”: { Firmware“: {”PlatformDefinitionTable“: {”Current“: {”VersionString"}}}}

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: string: Firmware

Module `rf.get_mem_blob`

Functions

Function `get_mem_blob`

```
def get_mem_blob(rfo, api=1, unit=1)
```

Aggregate memory DIMM information

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: list: JSON

Module `rf.get_mem_blob_alternative`

Functions

Function `get_mem_blob`

```
def get_mem_blob(rfo, api=1, unit=1)
```

Display aggregate memory information

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: list: JSON

Module `rf.get_memory_total`

Functions

Function `get_memory_total`

```
def get_memory_total(rfo, api=1, unit=1)
```

This function fetches the TOTAL MEMORY installed in the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/ Information is in the following JSON snippet. “MemorySummary”: { “TotalSystemMemoryGiB”:}

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: int: Total Memory

Module `rf.get_model`

Functions

Function `get_model`

```
def get_model(rfo, api=1, unit=1)
```

This function fetches the MODEL of the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/ MODEL information is at the top level of the JSON Hierarchy

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: str: Model Info

Module `rf.get_network_adapters_blob`

Functions

Function `get_network_adapters_blob`

```
def get_network_adapters_blob(rfo, api=1, unit=1)
```

Aggregate network adapter information

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: list: JSON

Module `rf.get_nic_blob`

Functions

Function `get_nic_blob`

```
def get_nic_blob(rfo, api=1, unit=1)
```

This function fetches information about EACH of the network interfaces of the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/EthernetInterfaces/

NOTE: There could be multiple interfaces in the server.

Parameters: object: Redfish Client Login Object int: API Value int: Unit Value

Returns: list: JSON - Details of each of the Ethernet Interfaces in the Server

Module `rf.get_nic_names`

Functions

Function `get_nic_names`

```
def get_nic_names(rfo, api=1, unit=1)
```

This function fetches the names of the NICS on the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/ MODEL information is at the top level of the JSON Hierarchy

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: list: Names of the NICS on the server

Module `rf.get_status`

Functions

Function `get_status`

```
def get_status(rfo, api=1, unit=1)
```

This function fetches the Health Status of the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/ Information is in the following JSON snippet. “Status”: { “Health”:}

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: str: Health Status

Module `rf.get_tag`

Functions

Function `get_tag`

```
def get_tag(rfo, api=1, unit=1)
```

This function fetches the ASSET TAG of the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/ Information is in the following JSON snippet. “AssetTag”: ""

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: str: Asset Tag

Module `rf.get_uuid`

Functions

Function `get_uuid`

```
def get_uuid(rfo, api=1, unit=1)
```

This function fetches the UUID of the server. URL is https://IP_ADDRESS/redfish/v1/systems/1/ Information is in the following JSON snippet. “UUID”:

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: str: UUID

Module `rf.login`

Functions

Function `login`

```
def login(un, pw, url)
```

Login to Redfish API un: (str) User name pw: (str) User password url: (str) HTTPS RedFish API URL Return: Redfish object

Module `rf.reboot_server`

Functions

Function `reboot_server`

```
def reboot_server(rfo, api=1, unit=1)
```

Reboot server

Parameters: rfo (object): Redfish Client Login Object api (int): API Value unit (int): Unit Value

Returns: str: Reboot status

Module `rf.set_boot_order`

Functions

Function `set_boot_order`

```
def set_boot_order(rfo, order, api=1, unit=1)
```

Set processor turbo boost technology

Parameters: rfo (object): Redfish login session order (list): Ordered list of devices api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_dns`

Functions

Function `set_dns`

```
def set_dns(rfo, dns, api=1, unit=1)
```

Set Primary DNS Servers

Parameters: rfo (object): Redfish session dns (array): List of DNS server IP addresses api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_firmware`

Functions

Function `set_firmware`

```
def set_firmware(rfo, firmware, update_repo=True, update_target=False)
```

Upload firmware to iLO repository and optionally apply

Parameters: rfo (object): Redfish session firmware (str): Path to file location (ie “data/ilo5_215.bin”) update_repo (boolean): Upload firmware to iLO repository update_target (boolean): Apply firmware

Returns: str: iLO response status

Module `rf.set_hostname`

Functions

Function `set_hostname`

```
def set_hostname(rfo, hostname, api=1, unit=1)
```

Set iLO hostname

Parameters: rfo (object): Redfish login session hostname (str): Host name api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_jitter`

Functions

Function `set_jitter`

```
def set_jitter(rfo, mode, api=1, unit=1)
```

Set processor jitter control

Parameters: rfo (object): Redfish login session mode (str): Disabled, Auto-tuned, Manual-tuned api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_license_key`

Functions

Function `set_license_key`

```
def set_license_key(rfo, key, api=1, unit=1)
```

Set iLO license key

Parameters: rfo (object): Redfish session key (str): License key api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_ntp`

Functions

Function `set_ntp`

```
def set_ntp(rfo, ntp, api=1, unit=1)
```

Set static NTP servers

Parameters: rfo (object): Redfish login session ntp (array): Array of IP addresses api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_power_options`

Functions

Function `set_power_options`

```
def set_power_options(rfo, mode, api=1, unit=1)
```

Set power mode options

Parameters: rfo (object): Redfish login session mode (str): Power mode TODO: power modes available api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_snmp`

Functions

Function `set_snmp`

```
def set_snmp(rfo, destinations, api=1, unit=1)
```

Set SNMP Alert Destinations

Parameters: rfo (object): Redfish login session destinations (array): The IP address or FQDN of remote management system that receive SNMP alerts. api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_snmp_alerts`

Functions

Function `set_snmp_alerts`

```
def set_snmp_alerts(rfo, alert, communities, api=1, unit=1)
```

Set SNMP enable alerts and read communities

Parameters: rfo (object): Redfish login session alert (boolean): Enable alerts community (array): SNMP read communities api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_timezone`

Functions

Function `set_timezone`

```
def set_timezone(rfo, tz, api=1, unit=1)
```

Set iLO timezone

Parameters: rfo (object): Redfish login session tz (str): Examples: UtcM10:UTC-10:00, Hawaii UtcM8:UTC-08:00, Pacific Time(US & Canada) UtcM7:UTC-07:00, Mountain Time (US & Canada) UtcM6:UTC-06:00, Central America, Central Time(US & Canada) UtcM5:UTC-05:00, Eastern Time(US & Canada) api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_turbo`

Functions

Function `set_turbo`

```
def set_turbo(rfo, mode, api=1, unit=1)
```

Set processor turbo boost technology

Parameters: rfo (object): Redfish login session mode (str): Enabled, Disabled api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status

Module `rf.set_virtualization`

Functions

Function `set_virtualization`

```
def set_virtualization(rfo, mode, api=1, unit=1)
```

Enable processor hypervisor virtualization

Parameters: rfo (object): Redfish login session mode (str): Enabled, Disabled api (int): API version unit (int): Enumerated component unit

Returns: str: iLO response status
